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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,097	10/29/2001	Robert E. Haines	10012346-1	1532

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HEWLETT-PACKARD COMPANY
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EXAMINER

SALL, EL HADJI MALICK

ART UNIT	PAPER NUMBER
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2157

MAIL DATE	DELIVERY MODE
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09/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/015,097

Applicant(s)

HAINES, ROBERT E.

Examiner

El Hadji M. Sall

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the correspondence filed on December 8, 2006.

Claim 1 is amended. Claims 1-4 and 6-14 are pending. Claims 1-4 and 6-14 represent dynamic mapping of wireless network devices.

2. ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable Kuehnel U.S. 5,787,077 over Jiang 6,741,853.

Kuehnel teaches the invention substantially as claimed including dynamic connection mapping in wireless ATM systems (see abstract).

As to claim 1, Kuehnel teaches a dynamic map of a wireless network, comprising:

representations of a plurality of network devices depicting locations of the network devices relative to a reference point, wherein the locations of the representations are adapted for updating in responses to changes in mapping information contained on a computer-usable medium of one of the network devices without the need for manual intervention (column 8, lines 52-56; see abstract);

wherein the representations comprise visual, audible and/or tactile indicators (figure 6); and wherein the representations provide an indication of at least a relative distance between their respective network device and the reference point (column 4, lines 59-62; column 2, lines 25-36).

Kuehnel fails to teach explicitly a representation of a first network device of the plurality of network devices that is requesting a service on the wireless network; and a representation of a second network device of the plurality of network devices that is capable of providing the requested service; wherein the representation of the first network device is highlighted to differentiate it from representations of other network devices; and wherein the representation of the second network device is highlighted to differentiate it from representations of other network devices that are incapable of providing the requested service.

However, Jiang teaches a representation of a first network device of the plurality of network devices that is requesting a service on the wireless network (column 21, lines 23-26); and

a representation of a second network device of the plurality of network devices that is capable of providing the requested service (column 21, lines 16-19);

wherein the representation of the first network device is highlighted to differentiate it from representations of other network devices (column 5, lines 36-40); and

wherein the representation of the second network device is highlighted to differentiate it from representations of other network devices that are incapable of providing the requested service (column 7, line 64 to column 8, line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kuehnel in view of Jiang to provide a representation of a first network device of the plurality of network devices that is requesting a service on the wireless network; and a representation of a second network device of the plurality of network devices that is capable of providing the requested service; wherein the representation of the first network device is highlighted to differentiate it from representations of other network devices; and wherein the representation of the second network device is highlighted to differentiate it from representations of other network devices that are incapable of providing the requested service. One would be motivated to do so to allow presenting information in a format suitable to the device being used (abstract).

As to claim 2, Kuehnel teaches the dynamic map of claim 1, wherein at least one of the network devices or the reference point is a transient device of the wireless network (column 2, line 66 to column 3, line 13)).

As to claim 3, Kuehnel teaches the dynamic map of claim 1, further comprising representations of logical connectivity of the plurality of network devices (column 3, lines 18-24).

As to claim 4, Kuehnel teaches the dynamic map of claim 1.

Kuehnel fails to teach explicitly the representations of the plurality of network devices comprise an ordered list of a set of the network devices capable of providing a service requested by another network device of the wireless network, and wherein the order of the list is indicative of a proximity of each of the plurality of network devices to the network device requesting the service.

However, Jiang teaches the representations of the plurality of network devices comprise an ordered list of a set of the network devices capable of providing a service requested by another network device of the wireless network, and wherein the order of the list is indicative of a proximity of each of the plurality of network devices to the network device requesting the service (column 19, lines 39-54; column 15, lines 46-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kuehnel in view of Jiang to provide the representations of the plurality of network devices comprising an ordered list of a set of the network devices capable of providing a service requested by another network device of the wireless network, and wherein the order of the list is indicative of a proximity of each of the plurality of network devices to the network device requesting the service. One would be motivated to do so to allow users ability to request and receive location-based information (column 15, lines 47-48).

As to claim 6, Kuehnel teaches the dynamic map of claim 5, further comprising:
a representation of at least one third network device of the plurality of network devices that is capable of providing the requested service; wherein the representation of the at least one third network device is highlighted to differentiate it from representations of other network devices that are incapable of providing the requested service (column 6, line 64 to column 7, line 5);

As to claim 7, Kuehnel teaches the dynamic map of claim 6, wherein the second network device is a device most closely matching a selection criteria to provide the requested service and wherein the highlighting of the representation of the second network device further differentiates it from a representation of each third network device (column 11, lines 36-40).

As to claim 8, Kuehnel teaches the dynamic map of claim 5, further comprising:
a representation of a path between the first network device and the second network device (column 3, lines 8-13).

As to claim 9, Kuehnel teaches the dynamic map of claim 8, wherein the representation of the path between the first network device and the second network device accounts for obstructions between the first network device and the second network device (column 3, line 60 to column 4, line 3).

As to claim 10, Kuehnel teaches the dynamic map of claim 8, further comprising:
a representation of a path between the first network device and each of the third network devices (column 3, lines 8-13).

As to claim 11, Kuehnel teaches the dynamic map of claim 10, wherein the representation of the path between the first network device and each of the third second network devices accounts for obstructions between the first network device and the third network devices (column 3, line 60 to column 4, line 3).

As to claim 12, Kuehnel teaches the dynamic map of claim 1, further comprising
a directional indicator indicative of a direction between a first network device requesting a service on the wireless network and a second network device selected to provide the requested service (figure 6).

As to claim 13, Kuehnel teaches the dynamic map of claim 1, further comprising a distance indicator indicative of a distance between a first network device requesting a service on the wireless network and a second network device selected to provide the requested service (column 7, line 57 to column 8, line 10).

As to claim 14, Kuehnel teaches the dynamic map of claim 13, wherein the distance indicator accounts for obstructions in a path between the first network device and the second network device (column 3, line 60 to column 4, line 3).

4. *Response to Arguments*

Applicant's arguments filed 06/18/07 have been fully considered but they are not persuasive.

(A) As to claim 1, Applicant contends that the dynamic mapping of the primary references of Kuehnel et al. is a mapping of communication connectivity, and not locations of its devices relative to a reference point.

In regards to point (A), examiner respectfully disagrees.

Column 3, lines 8-13, Kuehnel discloses a mapping unit for mapping ATM cells received on the wireless access part into a selected virtual path (i.e. "location of

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devices") on the respective fixed link (i.e. "reference point") to said controller, and for mapping ATM cells received on the selected virtual path of the respective fixed link into the wireless connection to said first mobile terminal. An inventive method is also provided.

(B) Applicant contends that Kuehnel et al. fails to teach or suggest representations of its network devices depicting their locations relative to a reference point.

In regards to point (B), examiner respectfully disagrees.

In figure 2, Kuehnel discloses representation of network devices such as 21 and 22 "depicting their locations relative" to a fixed link 23 (i.e. "reference point") as detailed in the figure.

(C) Applicant argues that Jiang et al. suffers the same deficiencies as the primary reference of Kuehnel et al. in that Jiang et al. does not deal with a dynamic map of a wireless network comprising representations of a plurality of network devices depicting locations of the network devices relative to a reference point.

In regards to point (C), examiner respectfully disagrees.

Such feature is taught by Kuehnel, and it was addressed in points (A) and (B).

(D) Applicant contends that the cited section, and the cited reference as a whole, fail to teach or suggest that a visual, audible and/or tactile indicator is highlighted

to differentiate one representation of a network device from visual, audible and/or tactile indicators representing other network devices.

In regards to point (D), examiner respectfully disagrees.

In figure 6, Kuehnel discloses the access point and its interconnections, a representation of audible device (item 25 (1)) is highlighted to differentiate one representation of a network device (i.e. 22(1) from an audible (i.e. 25 (i)) representing other network devices (i.e. 22(m-1)).

(E) Applicant contends that the cited section, and the cited reference as a whole, fail to teach or suggest that a visual, audible and/or tactile indicator is highlighted to differentiate one representation of a network device from visual, audible and/or tactile indicators representing other network devices that are incapable of providing a requested service.

In regards to point (E), examiner respectfully disagrees.

In column 7, line 64 to column 8, line 7, Jiang discloses cellular networks used to provide Internet access for PDA users (i.e. "incapable to provide a requested service"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kuehnel in view of Jiang to provide a visual, audible and/or tactile indicator is highlighted to differentiate one representation of a network device from visual, audible and/or tactile indicators representing other network devices that are incapable of providing a requested service. One would be motivated to do so to allow presenting information in a format suitable to the device being used (abstract)

(F) Applicant contends that the primary reference of Kuehnel et al. and the secondary reference of Jiang et al. fail to teach or suggest any limitation of Applicant's claim 1 in that they do not purport to concern dynamic maps of a wireless network comprising representations of a plurality of network devices depicting locations of the network devices relative to a reference point

In regards to point (F), examiner respectfully disagrees.

Such limitation was addressed in the above points.

5. Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

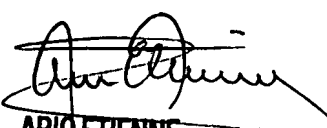
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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall

Patent Examiner

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